OTHER NOTICES

Charles, Enid, M.A., Ph.D. *The Practice of Birth Control.* London, 1932. Williams and Norgate. Pp. 190. Price 10s. 6d.

THOSE who study the question of contraception are continually confronted with the problem as to which of the many methods at their disposal is the most reliable. In Dr. Charles's book we have a definite attempt to arrive at a conclusion as far as one group of the methods is concerned; but it is a pity that the other, the chemical group, is almost neglected. This is the more important when one realizes that chemical methods are being sold in ever-increasing quantities, while as yet we have no authoritative information as to whether they are successful or not. One or two minor points may be raised—for instance, it is generally conceded that a chemical pessary is called a suppository; "Contraceptaline" should be written "Contraceptalene," and finally, is it too much to implore workers upon this subject to find out for themselves what books of worth exist and are capable of giving authoritative information?

It is gratifying to note that where chemical methods are touched on, they are divided and sub-divided into the different systems and types, since chemical analysis has shown that the chemical constitution of two which are very similar in appearance, may yield entirely different spermicidal results both in the laboratory and, as a short series of clinical cases would indicate, in practice.

This work nevertheless will prove important as a method of study, and it is to be hoped that it is merely the precursor of a second edition in which an extended series embracing both types of methods is included.

C. I. B. VOGE.

Exner, M. J., M.D. *The Sexual Side of Marriage.* London, 1932. Allen and Unwin. Pp. 249. Price 6s.

A hundred years ago Christina Pontifex began her married life in tears when, as a wearied bride, her husband insisted on her ordering the dinner at Newmarket because "it is a wife's duty to order her husband's dinner." The modern bride and bridegroom do not take housekeeping so seriously; they learn to fry the potatoes and wash up together as one of the games of married life. The most valuable moral of Dr. Exner's book is that they should study the physical side of marriage in the same spirit—as a game needing care and patience and mutual help, but where the first failures should be a matter for laughter rather than for tragic tears. If marriages could be started in this spirit many of the difficulties which occur so commonly even in happy marriages would disappear.

"Like all young men, you greatly exaggerate the difference between one young woman and another," says Andrew Undershaft. This may be true of externals, but even now, too many people, having read one or two popular articles on psychology, think they know what "all normal men or women" need in sexual life, and if they find themselves or their partner different, assume either perversion or wilful contrariness. The quotations from eminent psychologists and the results of questionnaires given in this book should correct this assumption. That there is a certain amount of rather wordy repetition will perhaps enforce the lesson.

Useful as the book is, one wishes for a shorter, cheap edition, written in words of one syllable, to give to the many perplexed wives and husbands who have no acquaintance with scientific terms. No one who has talked, say, with the patients at birth control clinics, can fail to be appalled at the sordidness and unconscious cruelty of the average well-meaning wife's attitude towards sex and her husband. "I've got a good husband, he doesn't bother me often," is the recognized form of praise. That the physical side of marriage should be more than a boring concession to the unreasonableness of man seems simply never to have occurred to them; but the courageous expression of views such as those put forward by Dr. Exner, will often be received with pleased surprise. If a kinder attitude could be spread among the self-respecting wives of to-day, the average husband would have less cause to complain that he has been reluctantly towed round Cape Turk by a consort who still denies him his reward of a loving partnership.

HELEN PEASE.

Guchteneere, R. de, M.D. *Judgment on Birth Control.* Sheed & Ward. London, 1931. Pp. 223. Price 6s.

BESET by the conflicting claims of advocates and opponents of birth control, and torn between the dictates of reason and necessity and of ecclesiastical or puritanical morality, there must be thousands who have yearned for an unbiased authoritative judgment on the subject—and one is now offered us. Naturally our interest was keenly excited, especially as we were unaware of the existence of such an authority, but on hastily opening the book in the middle a few phrases had such a familiar appearance that we turned to the title page to find the legend. *"Nihil obstat: Eduardus Mahoney, S.T.D., censor deputatus imprimatur . . ."*

and with this and the final chapter on "The Catholic View of Birth" our guess at the source of its inspiration was confirmed. What no man of the highest scientific authority would venture to claim, is easy to one who can write "The Church by virtue of its divine origin and its secular experience, is able to embrace the whole of human nature in all its complexity and fullness"; and we who are outside its pale can only admire the assurance which it confers on its adherents. Judgments belong to them; all others are merely advocates, and every advocate of birth control, apparently, an *advocatus diaboli*.

In spite of its all-embracing knowledge of human nature "the Church" does not yet seem to have learnt the elementary fact that the only security for infallibility lies in abstention from reason and argument. Even this does not save it in the long run, as the experience of the Copernican and evolutionary doctrines have shown, but it puts off the evil day. Conscious, however, that reverence for authority is at a discount in these days, the author condescends to give us arguments and reasons in seven chapters entitled, "Malthusianism and the Facts," "Neo-Malthusianism and Birth Control," "The Economic Argument," "Birth Control and Eugenics," "The Medical Aspect of Birth Control," "Birth Control and Morals," and "The Catholic View of Birth." Those who have not read previous effusions of this kind, such as those of Professor Foerster, may find them interesting, but to those who have it may be a shock to find the same old arguments and assertions, unless they remember the proud boast of "the Church," "*Quod Semper. . . .*"

In spite of the almost universal contempt in which the Malthusian doctrine is held, it seems to act like a candle to moths who are impelled to flutter round it until they are dazzled and fall with singed wings, while the candle goes on shining. The author has succumbed to the temptation to tilt at this doctrine of "an obscure parson," and tells us that it does not accord with the facts, as "such an increase" (doubling each twenty-five years) "has never been found in practice," and that there is some automatic agency which regulates fertility to the means of subsistence.

As a matter of fact, the doubling in each twenty-five years postulated by Malthus did occur in the United States for the first three-quarters of last century; but it is the very essence of the Malthusian doctrine that it rarely can happen, owing to the impossibility of increasing subsistence fast enough to provide for it, except in special and temporary circumstances.

The first law of motion states that every body remains in a state of rest or of uniform motion in a straight line except in so far as it is affected by external forces—but no one has ever seen a body continuing to move steadily in a straight line, because external forces are never absent. What Malthus meant was that population would double every twenty-five years, if subsistence was always adequate to support it; and there can be no doubt that he understated its rate of increase. We have had countries like Russia and parts of Egypt in which the birth rate was 50 per thousand or 5 per cent., and others like New Zealand and Australia in which the death rate has been under 10 per thousand or 1 per cent. Hence we are justified in claiming that a community which could obtain adequate subsistence for full health with sufficient, but not excessive, toil, would increase at a rate of at least 4 per cent. per annum, which means doubling every 17½ years, or a 50-fold increase in each century. No one in his senses could possibly suppose that subsistence could increase over any large area or length of time at this rate, and this is quite sufficient to show the imperative necessity for a considerable restriction of reproduction if under-nutrition is to be avoided, without any need for postulating an arithmetical increase of subsistence; although Malthus was remarkably correct in his predictions even in this respect.

Of course there are several countries, notably India, in which there has been practically no attempt at birth restriction and which yet have much smaller birth rates than 50 per thousand; and this may appear at first sight to justify the claim of an automatic decrease of fertility. On the contrary, they are the best disproofs of it. India has only a birth rate of about 35 per thousand, *but the average duration of life of its inhabitants is less than 28 years.* Since the interval of fertility in women is from 15 to 45 years, this means that, on an average, only 13 out of a possible 30 years of fertility is available, and yet this provides two-thirds of the 50 per thousand birth rate above mentioned, in spite of the fact that over 70 per cent. of the people can only get one meagre meal of rice a day. To talk of an automatic decrease of fertility as overpopulation becomes imminent, in the face of such constant overpopulation and suffering, is an insult to our intelligence.

The author pours scorn upon the neo-Malthusian claim that the remarkable fall of the death rate and increase of longevity which has occurred in Western nations since birth control has become prevalent is due to the latter, and not to the great advances in medicine, surgery, hygiene and sanitation which have taken place over the same period. No one doubts that these have prolonged many lives, but that is quite another matter from assuming that they have lowered the general death rate. If food is inadequate for all, as it has always been until quite recently, the saving of one life by treatment or

surgery can only result in crowding out another. Harsh and absurd as this may sound, we have a remarkable illustration of its truth in the case of Japan which, according to the official figures, has almost exactly reversed the experience of this country in *raising* its birth rate from 17 per thousand in 1871 to about 34 at the present time. Japan has been remarkable for its rapid assimilation of Western science, including medicine, surgery, etc., and yet its death rate has *risen* from 11 to about 21 over the same period!

As a physician, the author appears most convincing when he deals with the medical aspect, and his list of the evil effects of birth control on women, endorsed by many medical authorities, is a formidable one. *Prima facie* it would not be unreasonable to expect that such a radical change in the highly important sex life of women would have disturbing effects; but nothing can do away with the fact that as birth rates have declined the longevity of both men and women has enormously increased—from the figure of 35 to 45 years before birth-control commenced, to 60 or 65 years to-day—and that it is still rapidly increasing. Moreover, recent figures have shown that the improvement in the death rate has taken place to a most remarkable extent especially during the reproductive period, both in men and women. Whatever disorders birth control methods may have produced (and it must be borne in mind that owing to lack of information the great majority of people have employed the least satisfactory methods), there is no gainsaying the fact that, on balance, they have been accompanied by an immense improvement in the health of the community. And we may confidently expect a considerable further improvement when better instruction becomes general. If the Roman Catholics wish to convince people of the harmfulness of birth control to health, they would be well advised to put official vital statistics on the *Index expurgatorius*.

Space does not permit of dealing with the economic arguments, which suffer from a complete misunderstanding of the population doctrine, but a word must be said on the moral aspect. Here the author shows us the eternal and unbridgeable gap between the tenets of Rome and of science. According to the latter, man is a "risen ape" and has risen from his anthropoid ancestors by slow evolution due to the struggle for existence. In the course of this evolution his intellect has developed to an understanding of cause and effect and to taking precautions for the future; but until birth control came on the scene man was still, like the lower animals, subject to the pitiless effects of the struggle for existence due to overpopulation.

The discovery of the means to regulate reproduction is therefore the greatest advance in human evolution, and ought to have been welcomed by all humanitarians, and especially by any Christian church worthy of the name, as affording the only means by which the Christian ideals of love, compassion, peace, and brotherhood could be attained. Most of the other Churches are turning to this view, but Rome remains implacable. Neither the poverty and misery of two-thirds of the human race, nor the agonies of women, move her. Birth control is contrary to "natural law" and the purposes for which marriage was "ordained," and there is the end of it; although there is no passage in Scripture which would justify such a claim.

Of course, even "the Church" has been obliged to admit the necessity for restraint of reproduction. Starting with celibacy of the priesthood, she has recently permitted continence in marriage, and the "*tempus ageneseos*," and now grudgingly admits that the two latter may be justified in cases of hereditary disease and even of severe poverty; although according to the author the latter should not be necessary if the State did its duty to parents who exercise no restraint! We need not waste time over the futility of these concessions, except to point out that they are self-defeating by their very nature, as they have a powerful selective action in recruiting the race from those who have the strongest sex passions. There can be little doubt that the intensity of this passion in civilized nations, which "the Church" so greatly deplores, has been greatly fostered by its own repressive policy.

Lastly as to the eugenic aspect, it is a sign of the times that the author has to treat it with respect, although he gravely informs us that "In these matters it is wise to take counsel of the Catholic Church, which has never admitted the potential quality of the offspring as an impediment, of itself, to marriage. . . . The value of the progeny is not to be measured by physical qualities, but lies entirely in the high dignity of that supernatural destiny which is common to all. Even the marriage of the feeble-minded is forbidden only on the ground of their inability to make a valid contract, and not on account of the possible quality of their offspring." Apparently it is an "inalienable right of every man to bring up children," and the attitude of "the Church" towards sterilization was defined at the fourth Council of Malines in 1920, "it is never permissible to render a man or woman unfit for fertile marriage, as is done quite illegitimately in certain countries on the pretext of human selection."

Our grateful thanks are due to the author for so clearly revealing the gulf which still exists between Roman Catholic and scientific thought, not only to outsiders but to the adherents of "the Church." For there is ample evidence

that the subservience of the faithful has already been strained to the breaking-point, and that they are hastening to follow the example of non-Catholics in adopting birth control. While this book may deter some, it will probably hasten the process for others, who will realize that all hope from their Church is vain. Meanwhile it may be well for the Roman Catholic Church to recognize that although science has no desire to usurp its Pontifical attitude, the right of judgment has now definitely passed over to science, and that the nearest approach to infallibility in controversial matters it can grant the Roman Catholic Church is that of being infallibly wrong.

C. V. DRYSDALE.

Jones, Donald F. (Editor). *Proceedings of the Sixth International Congress of Genetics, Ithaca, New York, 1932. Vol. 2.* Menasha, Wisconsin, 1932. Brooklyn Botanic Garden. Pp. 405. Unpriced.

THE editor of these Proceedings cannot be congratulated on the arrangement of the volume, which contains the abstracts of papers presented to the congress, together with a list of exhibits. The abstracts are printed in the alphabetical order of their authors and no attempt has been made at any classification. Furthermore, the only index is also an alphabetical list of authors, which, in view of the arrangement of the papers, is a pure waste of the six pages it occupies. As a result of this arrangement, anyone who is interested in some particular branch of genetics is forced to search through the whole volume. With the science of genetics attaining to the proportions it now does, it is to be hoped that this serious defect will be remedied in the report of the next congress. References to journals in which the papers are given in full could be given with advantage, as is done by the British Association.

The vast majority of the papers read are of a very specialized nature and deal with the details of breeding experiments. It is to be feared that the authors of many of them have little new knowledge to offer beyond the repetition of familiar results on new organisms. Taken as a whole, the papers tend to be rather sterile of new ideas on the major biological problems. This is possibly accounted for by the dogmatism pervading the papers that the problem of the mechanism of evolution has been definitely solved by the mutation and gene theories. It looks as though the geneticists are in danger of living too much in a world of their own and are getting out of touch with the rest of biological and physiological workers.

There are, of course, many exceptions to this. Thus J. Clausen, of Stanford University, California, in " Principles for a Joint Attack on Evolutionary Problems " keeps the general biological outlook well in mind. He rightly asks for " a closer contact with the living organisms in natural surroundings. Only to a very limited degree have geneticists studied the genetic interrelations of taxonomic units that are the immediate products of evolution as they invitingly offer themselves under such conditions."

N. P. Dubinin, of Moscow, presents a paper entitled " General scheme concerning the mechanism of organic evolution taken from the standpoint of modern genetics." The author here whets our appetite by saying : " There are four fundamental zones in the mechanism of evolution : Mutation process, genetic automatic processes, the lawfulness of the formation and dynamics of populations and the evolution of phenotypes," and merely refers to his own published papers (without any references) which are unfortunately printed in Russian. He has lost a fine opportunity of making his views more widely known, by not giving a fuller abstract.

A. L. Hagedoorn, of the University of Leiden, offers a useful contribution on " The Nature of the Genes in Relation to Mutation and Evolution." One paragraph of his contains some very valuable criticism : " But if we carelessly speak of ' new genes ' when we witness the production of recessive novelties, we over-rate the importance of mutation as a factor in evolution. Mutation produces new characters, generally through the loss of existing genes, but sometimes by a quantitative addition of the material of a gene already present. The important question is whether mutation ever adds a new substance to the genom (positive mutation) in multicellular organisms. This issue is obscured by glossing over the fundamental difference between genes and the lack of genes." This is a serious word of warning which geneticists should not overlook.

W. R. Horlacher and D. T. Killough, of Texas, in " The Production of Mutations in American Upland Cotton by Radiations " give some interesting results of the submission of seeds to X-rays. They report the production of two progressive mutations.

C. C. Hurst, of Cambridge, in the " Genetics of Evolution " sums up the present position well, but he seems to use the term " creative evolution " in a curious sense. By creative evolution, one is inclined to think of the hypothesis elaborated by Bernard Shaw in *Back to Methuselah*. Hurst is referring in his paper to the general doctrine of evolution, which is surely more generally and aptly termed " organic " evolution.

W. H. Longley, of Baltimore, wishes to propound a " Law of Evolution." He does not, however, define his law precisely, but it seems to have some connection with Willis's " age and area " hypothesis.

H. H. Newman, of Chicago, gives some very interesting details in his paper the " Mental

and Physical Difference in Identical Twins reared apart." This is information which has been badly needed. Thus he finds that " identical twins reared apart differ more than 2½ times as much as identical twins reared together and slightly more than fraternal twins reared together." He reports on ten cases, and it is to be hoped that he will be able to offer further information in the future.

C. C. HENTSCHEL.

Kirkpatrick, E. A., M.Ph. *The Sciences of Man in the Making. An Orientation Book.* London, 1932. Kegan Paul. Pp. xv + 396. Price 15s.

THIS is a text-book of sociology of the ordinary American type. It states a large number of facts or reputed facts, rather baldly, but is simply written and not badly arranged. It contains a chapter on Eugenics and Euthenics, which states the elementary facts in a somewhat colourless way. The author has, deliberately it seems, adopted the policy of referring, not to the original authorities and classical statements of a doctrine, but to some recent paper or book, in which it occurs; the result is that there is no mention of Darwin (whether Charles or Leonard), and only one vague reference to Galton. The only British eugenist whose name occurs at all is Professor Carr-Saunders. There are also a good many misprints, especially of proper names and in the index: Gobini (for Gobineau!) and Livy-Bruhl are examples.

F. C. S. SCHILLER.

McKerrow, James C., M.B. *Novius Organum. Essays in a New Metaphysic.* London, 1931. Longmans. Pp. viii + 278. Price 9s. net.

THIS is altogether an unusual book. The title suggests at once a contribution to the logic of science, but as one reads on, it becomes more and more of a puzzle why the author has used the word ' Organum ' at all. The book may fairly claim to be ' Novius,' but in no sense can it lay claim to the title ' Organum,' as that word is used by Bacon, and of Aristotle's logical writings. The sub-title ' Essays in a New Metaphysic ' has more justification. The Metaphysic, however, is almost wholly negative. There is no mind, no matter, no knowledge, no self. Philosophy is a phantasy, science merely " useful nonsense."

The author starts with what he calls a " fundamental postulate," which is that " the activity of natural systems tends to be repeated merely because it has occurred before." In other words the ' fundamental principle ' of the universe is " habit," and the initiation of " habit " the author attributes to " accident." To make certain that we are not doing him an injustice, let us take his own words: " It is by ' accident ' that natural systems of activity—atoms, stars, organisms—arise, and their ' animating ' principle is habit." The whole book is dogmatic in the extreme, and the dogmatism fittingly starts in this way, without any preliminary analysis of ' habit,' and without the adducing of any evidence for the statement that ' habit ' is a mere matter of the repetition of activity, which is contrary to the findings of the psychologist, and that an activity tends to be repeated merely because it has previously taken place, which is equally open to challenge. If ' habit ' is being used in a psychological sense, the author's contention can easily be refuted; if it is not being so used, there is neither definition of the special sense, nor is there evidence for the statements made.

The book consists of a series of essays—twelve in all. The titles are: " Novius Organum," " The World as Habit," " Cosmogony," " Vertebrate Evolution," " On Phyletic Affinities," " The Difficulties of Evolution," " Extruding the Subject," " Affection and Conation," " The Illusion of Immediate Experience," " The Biogenic Psychosis," " The Social Psychosis," " The Nature of Man." Each essay is dated, and the dates range from 1925 to 1930. Under these circumstances we do not look for continuity. Nevertheless the essays do hang together, if only because of the way in which the author rather flippantly dismisses the theories and opinions of one authority after another, and for his own negative conclusions.

The general character of the whole may be gathered from one quotation. " In fact ' experience,' " he says, " is ' normal hallucination.' What is abnormal in the hallucinated is not that they are hallucinated, but that they are hallucinated *differently* from the rest of us. In being ' conscious ' we are being hallucinated, and in ' thinking,' ' believing,' ' knowing ' that we are ' conscious,' and that our ' thinking,' etc., is the activity of a thinking subject, we are being deluded." According to the author the only positive fact in the universe is ' habit,' and its God is ' chance.' How does the author know that these are not also delusions? In spite of all this the book is interesting reading.

JAMES DREVER.

Macrae, Angus, M.A., M.B. *Talents and Temperaments.* London, 1932. Nisbet and Co. Pp. x + 210. Price 5s.

EVEN the confirmed scoffer of mental tests must admit that there is " something in it " when he is presented with the statistics of vocational guidance. His admission will be the less grudging if the statistics are sugar-coated by such a book as *Talents and Temperaments.*

Here is a most readable survey of the chief methods of discovering what intellectual gifts or lacunæ, what emotional powers or failings, a young person seeking advice on a job may possess. Dr. Macrae gives a clear historical outline of the mental test movement, and describes tests of "special abilities." He frankly admits that these last are still inexact, and that specific tests should be designed for each kind of work. The chapter on "Estimating Temperament and Character" convinces the reader that temperamental qualities are "usable and identifiable," and that they contribute enormously to happiness in work. Ingenious methods of judging character are outlined, and the contributions of psycho-analysis are sympathetically discussed.

Not content with reviewing what can be done to the children seeking jobs, Dr. Macrae tells how the jobs themselves should be analysed. Work can be thought of as manipulation of concrete materials, of papers, or of people; and different occupations demand different levels, as well as different kinds, of ability. Obviously the talents of the worker should match the requirements of the work, so as to avoid such lamentable situations as that of the sociable dentist who finds his work intolerable since it means constant proximity to people who cannot talk.

The book concludes with accounts of vocational guidance studies. In general it is found that "the young people whose occupations are most similar to those advised tend to be the most successful." It would be interesting to know just how far the advice corroborated and how far it altered previous disposition. Unfortunately, there is no mention of the many studies in which mental tests have been used to investigate hereditary and environmental influences.

Talents and Temperaments leaves one feeling that square pegs can be prevented from landing in round holes. The vocational adviser may be thought of as someone who has standardized the findings of common sense. When a client comes to him, he turns as a matter of course to the parent, the teacher, and the doctor for information. Then he enlarges this knowledge by means of a battery of tests, thereby discovering where his client stands in relation to others of like age, education, and social class. The adviser, knowing the local opportunities, can then tell the aspiring youth what occupations he would most likely find congenial, and warn against others as being too far above or below his abilities. True, the psychological method cannot deal with certainties, being forced by the fact of human nature to deal with probabilities only. The laws of chance, however, show that tendencies have more consistent results than random movements, and *Talents and Temperaments* proves that vocational guidance makes for vocational fitness. It is thus worth reading even by those who would not go as far as Pascal in saying: "La chose la plus importante à toute la vie est le choix du métier."

B. S. BOSANQUET.

Marshall, F. H. A., F.R.S., and Hammond, John, M.A. *Fertility and Animal Breeding.* London, 1932. H.M. Stationery Office. Pp. 50. Price 1s. 6d.

THE fact that this bulletin should have achieved its third edition shows how useful it has proved to the stockbreeding community. The authors have taken this opportunity to revise it considerably. The first half deals in a general way with the physiology of reproduction and the problem of fertility and sterility. Considering the complexities of the subject, the authors are to be congratulated upon the manner of their exposition. The use of what is to the practical farmer merely scientific 'jargon' has been reduced to the irreducible minimum. At the same time, as one expects from such authors, essential accuracy is not sacrificed.

The relation of fatness to infertility is a point which is well recognized by the breeder of farm livestock. Nevertheless, there are not a few instances of females which have done exceptionally well at fat-stock shows and have then been put into the breeding herd without their fertility being impaired. These may be the exceptions, but they are not infrequent. Could it not be that in many cases it is the infertile animal that is exhibited in the showyard because, as the writers point out, the tendency to fatness is the antithesis to fertility?

The fact is mentioned that occasionally a male has a dislike for a certain female and will not serve her, such as a stallion refusing light-coloured mares, and so on. They state that this is rare, but in the reviewer's opinion, from experience in Scotland, it is not uncommon.

The writers touch but briefly on the problem of artificial insemination. This is probably because they are modest of their own work and that of their colleague Dr. Walton. It must, however, be recognized that any considerable advance of our knowledge concerning the technique of artificial insemination and the methods of maintaining the semen alive will be of the very greatest importance to the livestock industry in this country.

The second part of this bulletin deals in detail with aspects of fertility in the various classes of farm livestock. Readers of THE EUGENICS REVIEW will be interested to note that a mare bred to a thoroughbred or Arab stallion (a breed that usually goes 350 days) will be longer pregnant than when mated with a draught or common breed stallion (breeds that usually go

about 340 days). A mare carrying a mule foal also goes longer than when served by a horse, the ass going 365 days or more.

It is a pity that the authors, in dealing with the horse and the diagnosis of pregnancy, did not mention the work which has been conducted at the Institute of Animal Genetics on the application of the Zondek-Aschheim urine test* in mares. The success of this test as a diagnosis of pregnancy is quite remarkable. It has now passed from science to practice, and already for this season over two hundred mares have been tested. The method presently employed is not reliable as regards mares within sixty days of conception. If a similar test could be devised for cattle, it would be of very considerable value in the fight against sterility. The statement of the authors that pregnancy can be diagnosed in heifers five months after conception by the presence of a thick secretion from the teats does not, in the reviewer's opinion, hold good in more than a bare majority of cases.

Dealing with the sow, the authors point out the large number of degenerate fœtuses which occur. Most sows shed at each period sufficient ova to provide litters of twenty and few less than twelve, though only occasionally are litters of over fifteen produced. The writers state that it has been suggested that this fœtal degeneration may be due to a genetic lethal factor.

The importance of this bulletin may be judged from the statement on page 29 that the statistics collected from milk-recording societies show that the average life of a cow in a herd is just under five years, and that one of the chief causes of disposal is sterility, which accounts for about 23 per cent. of those disposed of each year. This bulletin should do much to enable breeders to overcome what is one of the most important problems and which has a considerable effect upon the economy of what they produce. The simple language which is used, the clarity with which the points are presented, the clear illustrations and, withal, the low price bring it well within the reach of the average breeder.

A. D. Buchanan Smith.

Mitchison, Naomi (Editor). *An Outline for Boys and Girls and their Parents.* London, 1932. Gollancz. Pp. 928. Price 8s. 6d.

The age in which we live is remarkable for the rapid progress in scientific discovery. Unfortunately our increase in knowledge has been accompanied by a growing inability to manage our social affairs. War, revolutions, and economic muddles have marked the last thirty years and, as suggested by one of the contributors to the book under review, this period of our history might well be described as " The Age of Violence."

Mrs. Mitchison's book is a genuine attempt to induce people to do a little thinking. Unlike so many mere books of knowledge, it sets out to show that science has a very much wider application than most people seem to realize. Mankind has been so busy applying the new knowledge to the various things which give immediate gratification that it has neglected to look ahead. The muddles from which we suffer are largely due to our failure to apply the new knowledge to our social problems.

The book is divided into three parts. The first deals with the physical sciences, the second is about civilization and the various economic and social problems arising from it, and in the third part the reader is given an introduction to the world of art.

The chapter on biology, contributed by Dr. John R. Baker, contains a description of the mechanism of heredity and ends with a section on eugenics. We entirely agree with the view expressed by Dr. Baker at the end of this section : " Unfortunately, they [feeble-minded persons] are increasing rapidly in numbers in Great Britain. Before long they will form quite a large proportion of our population, unless we decide not to allow them to have children. Members of Parliament who decide these things, think it best to let them go on multiplying. When they were young, Members of Parliament did not have an *Outline for Boys and Girls.*"

But Members of Parliament, whatever they think, are unlikely to express views which will not be accepted by those who elect them. Our only hope, therefore, of introducing measures of eugenic reform lies in convincing the public that they are necessary and possible. The importance of eugenics is also referred to in Section VII of Stapledon's contribution, " Making a Better Human Race," and in the paragraph which precedes it.

There are certain parts of the book with which many persons will disagree; for instance, on page 667 we are told that if people had the same money incomes, things would be fairer, and a capitalist system might produce what was really needed and not merely what could be paid for. Does this mean that a Faraday or a Newton ought to have the same income as a casual labourer, whose mental equipment does not even permit him to learn a trade with any hope of success? This doctrine may receive support by those who still believe in " the natural equality of man," but its truth will not be obvious to those who have discarded this fallacy. It is stated that the main reason why manual workers such as miners have to remain manual

* Allied to that employed on women, and now several years old.

workers and cannot earn more money is because of their poverty. Again, this is not obvious. Poverty may prevent a miner from becoming a doctor, but there are many other occupations, in which an expensive education is not required, open to those with brains. The truth is that even under the existing social system with all its shortcomings, such men do not usually remain manual workers, but rise to positions of greater responsibility. The greatest obstacle to advancement would appear to be not poverty, but lack of intelligence.

There are a large number of contributors to the book and it is easy to imagine the difficulty which Mrs. Mitchison must have had in driving her flock. The book is written in an attractive and easy style, and all those who are weary of hearing merely traditional views, and who desire to learn the truth about things in general, will welcome it as a valuable contribution.

F. S. GRIMSTON.

Money-Kyrle, R. E., M.A., Ph.D. *Aspasia, the Future of Amorality.* With an introduction by J. C. Flugel. London, 1932. Kegan Paul. Pp. 141. Price 3s. 6d.

THIS book appears to belong to the "To-day and To-morrow" series, although there is no statement to that effect on the title page. Like the other books of that series, it is characterized by a semi-facetious tone and a slight irresponsibility in the manner of treatment. There are some advantages in thus letting the savant take a holiday and deal with his subject in a more or less playful fashion. But the method has its dangers. It is sometimes a little difficult to discover where the facetiousness ends and the seriousness begins; and, under cover of this kind of ambiguity, a controversialist may manage to "get away with" a rather insufficient demonstration of some disputed points which he is really advancing with serious intent.

"In the present book," says Professor Flugel, "Dr. Money-Kyrle for the first time systematically asks the question whether a relaxation of our sexual taboos is not the best, perhaps indeed the only, way of attaining a higher morality, in the sense of a greater general charitableness among human beings." This statement of the thesis that is to be argued is amplified by the author in the preface. "Psychoanalysis has shown that depression and discontent are derivatives of hate. Therefore, a Utopia, in which happiness and contentment predominate must be a society based on universal love." It will be seen that the atmosphere of the book is highly psycho-analytical, and it is largely concerned with the Protean transformations of the Œdipus complex. The non-psycho-analytical reader gathers with some surprise that deep down in the Unconscious of every human being (or, at least of every male, for the immoral needs of the female seem to have been rather scantily provided for) is a murderous hate of his father combined with a jealous desire to obtain exclusive possession of his mother. The contrast of this dreadful state of affairs in the Unconscious with the amiability and affection which appear to the deluded eye of the unsophisticated observer recalls the account that Dr. Mercier gave some years ago of a psycho-analytic mutiny on an unnamed but undoubtedly mythical ship. The peculiarity of this mutiny was in the unusual behaviour of the ship's company. There, for instance, was the captain, walking the quarter-deck with his telescope under his arm, placidly giving his orders as if nothing had happened. The rest of the afterguard also walked the deck and gave their orders, while the "hands" carried on cheerily to the strains of "Paddy Doyle," or "Blow the man down," with respectful obedience. Yet there was a mutiny. Now, how could this strange discrepancy be accounted for? The explanation was quite simple. *The mutiny was in the overboard!*

The sense of unreality hinted at in Dr. Mercier's playful satire haunts the reader throughout the book as he follows the marvellous transformations of the ubiquitous Œdipus complex; and he gets the impression that this phenomenon is to the psycho-analyst what King Charles's head was to poor Mr. Dick. Indeed, it is something more; for it seems to possess—but in an inverted form—the virtues of a certain Universal Curative Syrup associated with the name of a mythical old woman. For, even as that priceless medicament was able to deal with the whole gamut of human ailment, from ophthalmia neonatorum at the one end to fistula *in ano* at the other, so the Œdipus complex seems to possess a versatility in the production of mischief that leaves the mediæval Satan "beat to a frazzle." In fact, it is the universal provider of mischief through the medium of our inextinguishable hatred of our fathers. It produces the mental depression of the unoccupied bore who (for excellent reasons) cannot endure his own sole society. It was responsible for the Great War, the Irish Rebellion and the Miners' strike. It inspires the activities of the Third International; and we suspect it of being at the bottom of the trouble about the land annuities. But all the time it keeps discreetly out of sight, tucked away in the Unconscious. The striker wants to smash the Capitalist because, in his Unconscious, the Capitalist symbolizes the hated father. But he is as unaware of it as is the Frenchman of the essentially paternal character of the German who grins at him across the frontier, or the Communist of the real motive for his economic envy of the bourgeoisie.

It is all rather confusing to the non-analytic reader; and there is the additional difficulty of

the slight ambiguity to which reference has been made. In a semi-facetious book, we realize that our "legs are being pulled." But the question is, how hard? It is difficult to judge the tension. We note that Dr. Money-Kyrle is a shrewd observer of social phenomena and a clear and original thinker on racial questions. He is also a sound eugenist, though perhaps a trifle optimistic as to the results obtainable in relatively short periods of time. In his views on social questions he shows not the faintest sign of crankiness, but, on the contrary, excellent judgment and solid common sense. So perhaps there is something in the Œdipus complex, after all.

Coming back to the main thesis of the book, we find it, in the actual exposition, much less alarming than Professor Flugel's introduction had led us to expect. The author comes in (with the professor) like a lion, but he goes out like a lamb. In effect, his proposal amounts to little more than a sober and reasonable plea for a reconsideration of the social conventions governing the relations of the sexes; for a recognition of the changes which have actually taken place, and for an elimination of the taboos that have survived inappropriately into the present from the ages of superstition. He is not in the smallest degree fanatical nor does he make any extravagant or shocking suggestions. It is not quite clear how far he would relax the current sexual morality; but from his very frank admission of the unfortunate results of over-enthusiastic experiments in this direction, we gather that a cautious and moderate reform, with a watchful eye on consequences, is what is in his mind.

But apart from propaganda, either for psychoanalysis or sex emancipation, this little book will be read with interest and pleasure. It abounds in wise and illuminating comments on the conditions of modern life, to which an added value is given by the author's wit, vivacity of style and literary skill, to say nothing of the excellent typography and the pleasant format of this admirable little volume.

R. AUSTIN FREEMAN.

Pailthorpe, Grace W. *Studies in the Psychology of Delinquency.* London, 1932. Medical Research Council; Stationery Office. Pp. 113. Price 2s.

A CONSIDERABLE amount of research has been carried out in this country of recent years concerning the psychology of delinquency, and the psychological treatment of certain forms of crime has become a matter for consideration. Dr. Grace W. Pailthorpe is among those who have been working at this subject, and during a period of five years investigated one hundred cases of female inmates in Holloway Prison (1923-7) and the same number of inmates in preventive and rescue homes for girls and young women (1927-8). The investigation in Holloway Prison was carried out with the permission of the Prison Commissioners, and the report, with the above title, is published with their permission, but, as the author points out, they do not necessarily agree with or hold the same opinions as herself.

Dr. Pailthorpe classifies the prison cases into three overlapping groups: defective, psychopathic, and adapted. She uses the term defective in a wider sense than is implied in the legal definition of mental defectiveness, and informs us that 64 per cent. of her cases were of normal intelligence, 21 per cent. of subnormal intelligence, 15 per cent. of defective intelligence, and 84 per cent. were deficient in sentiment development. But as soon as the statutory definition of mental defectiveness is discarded, widely different standards appear, and other workers dealing with the same material as Dr. Pailthorpe might not confirm her figures. Moreover, any estimate of deficiency of sentiment development must be largely influenced by the personal bias of the observer.

The author found 67 per cent. of the cases presented a psychopathic condition, including 44 cases who showed degrees of mental conflict; but it would appear that in the majority of the cases the mental conflict was the result and not the cause of the criminal conduct. Of the 39 adapted cases all are said to have been lacking in sentiment development.

In regard to the preventive home cases, 48 per cent. were of normal intelligence, 83 were deficient in sentiment development, and there were 87 cases in the psychopathic group. Dr. Pailthorpe states that a certain degree of psychoneurosis would probably be found in all the parents of the hundred inmates of preventive and rescue homes. The statement appears to be an assumption, and may be misleading.

The reader is introduced in an early part of the report to the legal definition of the word crime: "An unlawful act or default which is an offence against the public and which renders the perpetrator of such an act or default liable to legal punishment." And Dr. Pailthorpe sets out with the premise that crime is a symptom of underlying defect or disease. She proposes to treat this by a central clearing-station system where the patient would be fully investigated psychologically and treatment allocated, some going to a psychotherapeutic block, others to group and individual treatment centres, to permanent segregation or permanent supervision outside. Every offender, she states, should be sent in for investigation at the time of his first offence, and since the investigation centre will be called a hospital and not a prison, there will be no stigma attached.

The object of the proposed hospital is to eradicate crime by curing, through psychological treatment and other measures, the underlying psychological maladjustment and defects. But many people are punished daily in the criminal courts for motor and other offences who would resent a psychological examination, and in so doing would receive public support. Their resentment would also render futile any attempt to investigate their condition. There are also many offences which arise out of the natural reactions of the ordinary individual and require no explanation from a psychologist. Further, all persons who are experienced in prison administration agree that the proportion of first offenders who become re-convicted is very small, and the necessity for a full investigation into many of these cases is not apparent. It is interesting to note also that Dr. Hans Prinzhorn has estimated recently that not more than 20 to 30 per cent. of cases treated by psychotherapy are cured. If the reader is unwilling to accept assumptions, he is left to wonder why Dr. Pailthorpe's suggestions should be as effective as the present methods of dealing with crime. Many will think that to suggest to law breakers that they are diseased and defective persons can only diminish the sense of social obligation to others which is an integral part of our civilization.

Dr. Pailthorpe, obviously, has devoted much time and thought to this investigation. She has set out in considerable detail the histories of 20 cases, and by keeping in touch with some of the subjects over a prolonged period has added interest to her observations. But the subject bristles with difficulties legal, medical, and administrative. Concerning these the report is silent.

The problem of crime is admittedly complex. All recognize the importance of environmental, economic, and educational factors. They are, however, often independent of medical considerations. The reviewer believes that the facilities which already exist for the medical examination of accused persons are not always used as freely as they might be. He believes, also, that certain cases of criminal conduct may be amenable to psychotherapy. But, he suggests that in our present state of knowledge the general purpose of psychotherapy may be served best if only modest claims are made in regard to the treatment of crime by this agency.

W. NORWOOD EAST.

Sansome, F. W., Ph.D., F.L.S., F.R.S.E., and Philp, J., B.Sc., F.L.S. *Recent Advances in Plant Genetics.* London, 1932. J. & A. Churchill. Pp. x+414. Price 15s.

WE are accustomed to speak of the present era as the Age of Science, since in every walk of life advances as a result of scientific discoveries are apparent; but it may not be realized by those who are not intimately acquainted with biology how very greatly that science has progressed during the last fifty years. In no branch of biology has this progress been more spectacular than in genetics and cytology, and the accumulation of information has now become so prodigious that few save those who are actually engaged in research can hope to be familiar with what has been done. For this reason the present book is valuable, since it collects together much of the work and presents it in a summarized form within the confines of a reasonably small volume. Some idea of the scope of the book may be gauged by the fact that the authors include a bibliography which occupies close on fifty pages, and yet only cites the more important of the mass of papers which have been published.

It is natural that with such a wealth of material to draw upon the authors have been forced to adopt a very concise form of presentation, and this, together with the parenthetical citation of the authorities upon which almost every sentence is based, makes the reading of the book by no means simple. This volume of the series of " Recent Advances in Science " deals with plant genetics and is concerned mainly with stating the facts which research has demonstrated to exist, rather than in attempting to co-ordinate these facts into more generalized theories. Possibly it is early days to try to do this, yet it might be of assistance to the more general reader if a greater effort had been made in this direction at the expense of some of the other matter which is included. For example, although the book is intended to deal with plant genetics, a considerable space is devoted to the investigations on *Drosophila.* It must be admitted that work on mapping of the chromosomes has progressed further in this animal than in any other organism, yet the results have been so thoroughly expounded by Professor Morgan that they might have been omitted here and the space utilized in the way that has been indicated.

It is inevitable that in a book of this size the authors are compelled to select and drastically to exclude much which might have been put in, with the result that many will complain that their particular theories do not receive the space which they consider them to be entitled to. Nevertheless a satisfactory balance has been achieved, even if the work of the John Innes Horticultural Institution does receive what some rival colleges may regard as more than its fair share. The authors are to be congratulated on the selection of their diagrams, and in par-

ticular on some of the half-tone blocks which are a great advance on those in previous books of a similar nature. It seems a pity, however, that the unusual policy of burying the legend in the middle of the text on the opposite page has been adopted in one instance.

The book should be of value particularly to those who wish to know what has already been done in botanical genetics, and it is a useful summary of the present position of research in that field. It should also appeal to the student who requires a general introduction to plant genetics as well as to the general reader who is not afraid of tackling a fairly technical book.

W. R. IVIMEY COOK.

Schieffelin, Barbara, and Schwesinger, Gladys C. *Mental Tests and Heredity, Including a Survey of Non-Verbal Tests.* New York, 1930. Eugenics Research Association, Monograph Series. The Galton Publishing Company. Pp. ix + 298. Unpriced.

THIS monograph is divided into four parts. Part I attempts a rapid historical survey of tests of individual differences and of theories of intelligence. Part II discusses various views concerning the relative importance of environmental and hereditary factors in test performances. Part III briefly considers more or less accepted differences between verbal and non-verbal tests, and describes a large selection of tests of learning of both types. Part IV summarizes the earlier portions of the monograph and makes whatever general recommendations appear to the authors to be warranted by their survey. Each part is succeeded by a most useful selected bibliography, in which English titles very greatly predominate.

It is perhaps inevitable, considering its limits of space, that the monograph should be far more useful as a book of reference than as a reasoned survey of the present position as regards the precise value of psychological tests. The student who wishes to learn something about the immense range of tests available will find his labour much lightened by a consultation of this work. The two years which have elapsed since its publication have, naturally, added a large number more to the tests available in 1930, but the main principles of the tests proposed have not really altered very much, and, with the honourable exception of Porteous's *Psychology of a Primitive People* and some admirable contributions by Margaret Mead, very little new field work in psychology of a genuinely psychological nature has been carried out. As a reference book the monograph is both important and valuable, and it is as complete as could reasonably be expected.

If, however, we ask what the test movement has contributed, or may be expected to contribute, to the development of a scientific knowledge of eugenics, we shall find our authors a little less satisfactory. Perhaps this also was inevitable. They were bound, by the terms of their reference, to attempt a summary account of a mass of warring opinions and conflicting statements; and their summary is about as full and as fair as it could be. But what tends to appear is a discouraging impression of difference as to method and divergence of results.

The main recommendation that emerges is for the setting up of some central bureau or clearing-house for the scrutiny and comparison of test results obtained the world over. The authors recognize the many difficulties that such an institution would have to surmount, but they rightly decide that, in spite of all of these, something definite in the way of a central bureau will have to be set up before anything having wide implications will be regarded as established. Their suggestion is considerably nearer realization now than it was in 1930, owing to the extremely important movement for international co-operation in testing sponsored by Professor Thorndike and Professor C. E. Spearman and sympathetically discussed at the recent International Psychological Conference at Copenhagen. But it is now more clearly realized that a central bureau, if it is to accomplish anything, will have to do something more than simply accept test results from all and sundry and submit them to elaborate statistical analyses. It will have to deal authoritatively with methods and schemes of testing also, and it will have to narrow investigations to certain most promising fields of research. On these points the authors of the present monograph maintain a discreet silence.

Another matter which gives the authors some concern is that of the "universal test." By this is meant the possibility of utilizing tests having the same form and content the world over. It is shown clearly enough that the weight of opinion is rather strongly against the feasibility of such tests, but the authors are nevertheless, like many others, attracted by the idea, and are inclined to think that the search for universal tests should still go on. Nothing that has been done since this monograph appeared very strongly supports this view.

The case for the "universal test" rests largely on the opinion that non-verbal tests, i.e. tests that can be solved without the use of language, always will be solved without the use of language. This opinion is unfounded, as everybody who has tried this type of test knows very well. Language idiosyncrasies creep in to affect the performance in the case of non-verbal,

as in the case of every other kind of test. Not only so, but there are also group idiosyncrasies of performance and of representation which make comparative measures exceedingly difficult, even when the tests used have exactly the same form and content. In fact, however, tests may differ in form, or in content, or in both, and at the same time their solutions may be comparable in a psychological sense. The psychological emphasis is always upon the reactions and their form of determination.

If universal tests are desired, much the most useful kind of research at present would be to seek tasks which, though they may differ in their requirements, are nevertheless psychologically comparable in that they stimulate reaction tendencies of the same level. To some extent this is the idea behind "intra-group scaling," discussed sympathetically by the present authors. According to this scheme, specific test scores are not directly compared, but a scale is attempted in which special difficulties in a range of tests applied to one group are balanced against other special difficulties of the same range of tests in another group. Almost certainly, however, it would be possible to go much further than this. A genuinely psychological analysis of test performances ought to show what tasks are comparable in varying environments, even when the tasks use different material, different instructions, and different methods of solution. But so far nobody has seriously attempted this undoubtedly difficult undertaking.

Naturally the authors have much to say about the relative influence of environment and heredity. Here they are unusually, but justifiably downright. However careful the test, "the influence of nature and of nurture can never be disentangled within an individual." So far as qualitative psychological analysis goes they are right beyond question. Whether statistical analysis can go further—and on the matter of statistical method this monograph is distinctly weak—is still a matter of controversy. There is, for instance, a strong tendency in many directions to think that if statistical analysis reveals the operation of a "general" factor this must be in some sense heritable. Apart, however, from the fact that this view remains a matter of argument rather than of demonstration, there is the difficulty that a general factor statistically indicated is a mere function without character, so that the utmost it tells us is that "something is inherited" and perhaps that this something has a cognitive significance.

No doubt in some sense the distinction between what is inherited and what is contributed by an environment is fundamental for the science of eugenics. If, then, the study of test performances can throw no clear light on this distinction, the place of the psychological test in eugenics must perhaps remain a very subordinate one. But the psychologist, at any rate, is not likely to be satisfied by this conclusion, nor does it appear to be drawn by the authors of the monograph. Either by specific tests, or by the ordinary methods of psychological experiment, it certainly appears possible to determine and to characterize persistent differences of a psychological order between one social group and another. Whether these are actually inherited by the individual group member, or whether they are inevitably impressed upon him by the inescapable influence of group tradition, custom, structure, and trends makes little if any practical difference. They are there and they will certainly appear in the majority of the individuals who by birth or adoption belong to the group whose particular expression they are. When they are found, no doubt they still have to be valued before their eugenic significance is apparent. But they first have to be found and any technique for their discovery must have the greatest interest and importance.

No doubt the technique, both of the application and of the interpretation of psychological tests and experiment, stands in need of a vast amount of additional research. But there is no better available instrument. The test movement has suffered owing to the fact that it is excessively easy to apply all manner of tests with a certainty of getting some sort of results which can be elaborately treated and published, and also owing to the fact that it is easy for the ingenious mind to invent new tests or new variations of old tests. An authoritative consideration of the most profitable lines of research is greatly needed, and a thoroughgoing recognition of the fact that tests without psychology are of little use.

F. C. BARTLETT.

Shrubsall, F. C., M.A., M.D., F.R.C.P., D.P.H., and Williams, A. C., M.R.C.S., L.R.C.P., D.P.H. *Mental Deficiency Practice.* London, 1932. University of London Press. Pp. 352. Price 12s. 6d.

CONCERNING this book it is stated that "the aim of the authors is to deal with the subject from the aspect of the steps required to effect a satisfactory disposal of any given case." It is excellently adapted to this definite purpose.

It provides an admirably concise account of the various bases for classification and assessment, but some over-simplification has crept in. The usual distinction between primary and secondary amentia is propounded, the former being defined as that due to inherited factors

or germinal variation, the latter as that arising from illness or accident in pre- or post-natal life. There is, however, hardly a hint of the difficulty of applying the theoretical distinction so defined to individual cases. The primary group seems to be conceived as embracing all cases where anatomical deviations, if any, are of the non-specialized type and these cases only; within the secondary group appear to be included all patients belonging to specialized types —e.g. even cases of amaurotic family idiocy, where the influence of heredity is surely indisputable, and all instances of plegic amentia. There is much reason to believe that in many of the latter the defect is primary in the sense of the definition.

In the light of this perhaps unduly simple identification, the proportion of aments belonging to the primary, i.e. theoretically transmissible group, is given as 71 per cent. It is noted, however, that in lists based on children under seven there is a higher proportion of secondary cases, since such conditions as microcephaly and mongolism come to notice early, while in special schools which exclude those of imbecile grade over 90 per cent. are cases of primary amentia.

Such facts are of great significance to the eugenist. On the one hand, it may be conceded that any error introduced by the over simple identification of the authors is almost negligible practically. Whether any cases of mongolism, microcephaly, and plegic amentia be germinal or not, they are hardly more likely to reproduce than those of amaurotic family idiocy. On the other hand, it may be said that of those aments who remain at large until they reach the age of reproduction and thus have the chance of this, almost all are of the primary, i.e. transmitting type.

The authors state that the causes of primary amentia comprise all that is connoted by the term heredity, and all agencies that affect the germplasm, but there is little discussion as to how far, if at all, blastophoria can really be held responsible. There is little emphasis laid upon the possibility that some instances of amentia and some of psychoses developing later, are manifestations at different stages of the same germinal anomaly.

The book contains no reference to the problem of sterilization.

In fairness it should be said that absence from the book of emphasis upon many aspects of the subject of amentia which most interest the eugenist, cannot be counted against it; clearly its purpose is not speculative discussion, but strictly practical guidance. This purpose it fulfils admirably; it is well adapted to the requirements not only of those medical practitioners undertaking special duties in connection with mental deficiency, but also of many others, e.g. school medical officers and social workers of various kinds. It will meet the needs of candidates for the D.P.M. perhaps better than any existing book. If its contents could be substituted in the curriculum of all medical students for any one of several topics having less general utility, then the aims of the eugenist would be brought appreciably nearer to fulfilment.

EDWARD MAPOTHER.

White, Douglas, M.D. *Modern Light on Sex and Marriage.* London, 1932. Skeffington. Pp. 128. Price 3s. 6d.

THIS little book is one of a series of handbooks by members of the Modern Churchmen's Union. The author is well known as a specialist in this branch of medicine, and the book may be heartily recommended, combining as it does detailed and accurate information with perfect good taste. The advice to young husbands is excellent; how strange that until quite lately it was impossible to give it in print! An interesting point which he mentions is the widespreading influence of the physiological error that the male is the only real progenitor. Readers of *Æschylus* will remember that the Furies are forbidden to continue their persecution of Orestes for the murder of his mother, on the ground that a mother is not really a blood-relation! So Apollo explains in *Eumenides,* 658 *et seq.* From this error comes our habit of reckoning descent through the male line, and the old laws of inheritance. Dr. White strongly objects to separation-orders instead of divorce; on this subject most readers of this REVIEW will probably agree with him. His statements about the rapid decline of prostitution, and the consequent improvement in public health, are very interesting. He thinks that the time is coming when a concerted international effort might extinguish for all time, in a single generation, the worst form of venereal disease.

W. R. INGE.

Williams, Harley, M.D., D.P.H. *A Century of Public Health in Britain, 1832-1929.* London, 1932. A. & C. Black. Pp. xi+314. Price 7s. 6d.

THIS book describes the evolution of public health measures from the great movement for sanitary reform which followed the passing of the Reform Act a century ago to the Local Government Act of 1929. The work includes a history of the Poor Law which is traced back to the dissolution of the monasteries of Henry VIII, and the consequent cessation of the system of social relief which they maintained.

Among the subjects dealt with are the following: The control of infectious diseases, tuberculosis, maternity and child welfare, medical inspection in schools, and national health insurance.

The opposition which is provoked by those who propose reforms, is well brought out by the author in his survey of the period during which the movement grew. The book ends with chapters on Chadwick, Simon, Florence Nightingale, Galton, and Shaftesbury. Referring to Galton, the author states that "he stands apart from the great Victorian sanitarians; alone in appreciating the importance of hereditary endowment as a factor in health; alone in perceiving that environmental hygiene was not sufficient."

The book should be of great assistance to Medical Officers of Health and to those who are connected in any way with the social services.

F. S. GRIMSTON.

"X-Ray." *Love—An Outspoken Guide to Happy Marriage.* London, 1932. The C. W. Daniel Co. Pp. 55. Price: Paper, 1s., cloth 2s.

THIS should prove a most useful guide to young married people and those about to be married, not only in regard to their relation to each other, but particularly in their relation to, and upbringing of, their children. It never mentions eugenics specifically, but in its insistence upon choosing the right mate and in setting before young people a high ideal of parenthood it is obvious that, if such advice be followed, neither mate nor offspring are likely to prove dysgenic.

The reader is frequently urged to increase his knowledge on various points and to consult the many good books which have been written recently for his guidance. It would certainly add to the value of this excellent little book to have a bibliography at the end of each chapter.

URSULA GRANT DUFF.

PAMPHLETS

A Secular Encyclical on Humanizing Finance and Revitalizing Humanity. W. S. Bromhead. Pp. 46.

IN this little pamphlet the author represents the ideas he developed in *Human Capitalization* as a sort of panacea of our social ills. The worker is to capitalize his salary at 5 per cent., and the capital thus created will do away with the friction between the capital and labour, while a 'Wisbian' currency will refund to parents the cost of educating children and credit children with a capital that anticipates their future earning capacity. In this way the author hopes to reverse the evil differential birth rate from which civilized societies are now suffering. It is to be feared, however, that even if the scheme can meet the difficulties created by bad trade and bad personnel the unreasoning conservatism of *all* our politicians will refuse to take his proposals seriously.

F. C. S. SCHILLER.

On the Genetic Significance of Hemilateral Asymmetry in the Vertebrate Organism. By C. J. Bond. (No. 1, William Withering Lectures, 1932.) London, 1932. H. K. Lewis. Pp. 38. Price 2s. 6d.

IN this lecture Mr. C. J. Bond gives a most interesting account of the variations which occur from the typical bilateral symmetry of vertebrates. He does not merely refer to such well-known phenomena as gynandromorphs, but deals more with such cases of asymmetry as are found in the horns of cattle and the colour pattern in dogs and guinea pigs. He points out that many of these cases of asymmetry are inherited and offers various suggestions as to the explanation of the phenomenon. Mr. Bond has collected a most interesting series of facts which well demand more intensive investigation.

C. C. HENTSCHEL.